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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/087,125

03/04/2002

John R. Baldwin

43309

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7590

12/12/2003

Roylance, Abrams, Berdo & Goodman, L.L.P.
Suite 600
1300 19th Street
Washington, DC 20036

EXAMINER

LEJA, RONALD W

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 12/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,125

Applicant(s)

BALDWIN, JOHN R.

Examiner

Ronald W Leja

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on IDS of 1/22/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18-22 is/are rejected.
- 7) ☒ Claim(s) 16, 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1/03 5/02 . 6) ☐ Other: _____

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 6 and 18-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There appears to be a lack of antecedent basis for "said controller" in Claim 6. What is meant by "and to re-close said first and second contact sets after a predetermined period of time after verifying that said first and second contact sets have re-closed" in Claim 18?

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-9, 11-14 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Aromin (6,052,266).

Aromin discloses (see Fig. 1) a fault interrupter apparatus comprising an actuator (SOL1) with first (D3) and second (D1) electronic switching devices coupled to the actuator and the first switching device being adapted to energize the actuator for a period

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of time and the second switching device energizes the actuator after the first switching device ceases operation. See Col. 8, lines 14-25. (D3) and (D1) are reasonably considered to be electronic switching devices since they do not switch/conduct current until their breakdown threshold has been reached. (U1) is a fault sensing circuit comprising a ground fault interrupter chip (for Claim 9), which is also considered to be the controller of Claim 6. The processing device (U1) of Claim 11 is considered to be able to respond to a plurality of input signals and has a single input (3) adapted to receive more than one of the input signals (one from T1 and one from T2). Pin or input (4) receives a test button signal; pin (6) can receive a line voltage signal.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aromin.

Claim 5 requires that the first and second switching devices comprise transistors and Claim 15 requires that one of the inputs comprises a load voltage signal. It is well known in the art to couple transistors to perform as diodes, and as such, it would have been obvious replace the diodes, such as (D1,D3) with transistors as a

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means to reduce the number of different parts required by the design i.e. (Q1) is already a transistor in Fig. 1, thus leading to a more simplified design to implement at the factory. It would have been obvious to offer load voltage as an input to the ground chip (U1) as a means to offer more information about the system to the protection circuitry, thereby allowing for an increase in end-user safety.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aromin in view of Matsko et al. (5,936,817).

Aromin discloses in Fig. 1 for the set of Claims 7-10, that the processing device is (SCR1) and not a microprocessor as required by the language found in Claim 10. However, Matsko et al. teach in Fig. 2 that the processing device can be a microprocessor (28). It would have been obvious to include a microprocessor or even two microprocessors as fairly taught by Matsko et al. as a means to increase applications and protection by being able to process much more input data relating to fault conditions and data relating to the status of the various components, thereby leading to a more comprehensive protective design for the consumer.

8. Claims 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 18-21 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

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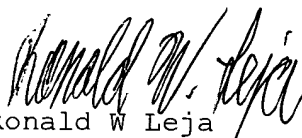
10. Claims 23 and 24 are allowed.

11. The following is a Statement of Reasons for the Indication of Allowable Subject Matter: The Prior Art of Record does not appear to disclose nor suggest the opening of the contacts, the re-closing of the contacts after the verification that the contacts have opened and extending the predetermined period of time if the contacts have not re-closed within the predetermined period of time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald W Leja whose telephone number is (703) 308-2008. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703) 308-3119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Ronald W Leja
Primary Examiner
Art Unit 2836

11/30/03

rwl
November 30, 2003